In [3]:
```python
# Ask the user to enter a positive integer
n = int(input("Enter a positive integer: "))

# Check if the input is positive
if n > 0:
    print("\nNumbers from 1 to n (using a for loop):")
    # Use a for loop to print all numbers from 1 to n
    for i in range(1, n + 1):
        print(i)

    print("\nSum of numbers from 1 to n (using a while loop):")
    # Use a while loop to calculate the sum of all numbers from 1 to n
    total = 0
    counter = 1
    while counter <= n:
        total += counter
        counter += 1
    print(total)
else:
    print("Please enter a positive integer.")
```

```
Numbers from 1 to n (using a for loop):
1
2
3
4

Sum of numbers from 1 to n (using a while loop):
10
```

In [5]:
```python
# Define a user-defined function to calculate the square of a number
def calculate_square(n):
    return n ** 2

# Main program
# Ask the user to input a positive integer
user_input = int(input("Enter a positive integer: "))

if user_input > 0:
    # Call the calculate_square function and display the result
    square = calculate_square(user_input)
    print(f"The square of {user_input} is {square}.")
else:
    print("Please enter a positive integer.")
```

```
The square of 45 is 2025.
```

In [ ]: